SHRI VISHNU ENGINEERING COLLEGE FOR WOMEN

BATCH - 8

SHINING SHIMMERS

Speech Emotion Recognition

A.Satyavathi: 19B01A0506: CSE
A.Sravanthi: 19B01A0511: CSE
M.Manasa : 19B01A0495 : ECE
P.Vyshnavi :19B01A0288: EEE
P.Deepthi : 19B01A0436: ECE
K.Honey : 19B01A0482 : ECE

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Introduction

- Speech Emotion Recognition is the act of attempting to recognize human emotion and effective states from speech
- To build a model to recognize emotion from speech using the librosa and sklearn libraries and the RAVDESS data set.

Approach

- Approach towards solving the problem :
- Day1:Extraction of features from sound file.
- Day2:Load and Split the data set.
- Day3:Create and Train the model.
- Day4:Making Predictions.
- Day5:Creating an interface for the implemented model.

Day1 Progress

- In this project, we will use the libraries librosa, soundfile, and sklearn, keras to build a model.
- This will be able to recognize emotion from sound files.

Dataset

- In this project, We use RAVDESS dataset; this is the Ryerson Audio-Visual Database of Emotional Speech and Song dataset.
- This dataset has 7356 files rated by 247 individuals 10 times on emotional validity, intensity, and genuineness.
- The entire dataset is 24.8GB from 24 actors.

Extracting Features

- Feature Extraction aims to reduce the number of features in a dataset by creating new features from the existing ones (and then discarding the original features).

Loading the Dataset

- Upload dataset into a folder in google drive
- Link the google drive with colab
- Run the drive link cell in google colab notebook

Day2 Progress

- Initialisation of MLP Classifier (Multi-Layer Perceptron classifier).
- We have train the model and make predictions .
- Testing with other models like SVM(Support Vector Machine).

THANK YOU